Readiness Review Hazard Identification Checklist

Name of Activity:_____ Activity Supervisor (Print):_____ Room:_____ Building:_____

SC/SR Signature	Employee #	Date	Group Leader Signature (Approval)	Employee #	Date

IMPORTANT! Attach a hazard management statement for each item checked below.

Check all of the following that are applicable to/or involved with the activity. This checklist will be utilized by ESH&A in review of the activity.

A. Chemical and Biological Concerns

1. ___ Mercury or mercury compounds (e.g. dimethyl mercury).
2. ___ Research involving human subjects or animal studies.
3. ___ Chemicals requiring personnel medical monitoring (see Federally Regulated Hazards).
4. ___ Hazardous or toxic chemicals (see Ames Lab EPA List).
5. ___ Extremely hazardous substances
6. ___ Flammable chemicals (flashpoint < 100ºF) in quantities greater than 4 liters (1 gallon) in one room.
7. ___ Perchloric or picric acid, peroxide-formers (see Peroxide Forming Chemicals).
8. ___ Pyrophoric or explosive materials (see Chemical Incompatibilities).
9. ___ Activities that generate potentially hazardous ambient air concentrations of nanoscale and other particulates, mists, fumes, vapors, or asphyxiates.
10. ___ Generation of chemical, mixed, or radioactive waste (as defined by the Ames Laboratory Waste Management Program Manual).
11. ___ Generation of new waste streams, or a > 20% increase in an existing waste stream.
12. ___ Biological materials including human, plant or animal pathogens (see Biohazardous Materials).
13. ___ Suspected and/or confirmed carcinogens (see Carcinogenic Substances).
14. ___ Activities that involve the use of engineered nanoscale materials (< 100 nanometers).

B. Radiation Concerns

1. ___ Radioactive materials, radiation sources.
2. ___ Lasers (excludes laser printers and pointers).
3. ___ Radio frequency (RF) or microwave generators (excluding personal microwave ovens) of greater than 10 watts average output power.
4. ___ Ultraviolet radiation, which could expose personnel (e.g. arc welding, inductively coupled plasma, UV reactors, xenon lamps, etc.).
5. ___ Generation of Radioactively contaminated waste as defined by the Ames Laboratory Waste Management Program Manual.
6. ___ X-ray generating devices.

C. Electrical Concerns

1. ___ Work with exposed electrical wiring or parts with voltages greater than 50 volts.
2. ___ Work with stored energy systems (e.g. capacitor banks > 10 joules; station battery systems > 50 volts).
3. ___ Voltage systems of greater than 600 volts.
4. ___ Current systems of greater than 25 amps.
5. ___ Electrical devices not certified by a Nationally Recognized Testing Laboratory (e.g. Underwriters Laboratory, CSA, etc.).

D. Environmental Concerns

1. ___ Potential to release hazardous, radioactive materials or oil products (include oil filled equipment/containers with a capacity ≥55 gallons) to the sanitary or storm sewers, soil.
2. ___ Potential for release of chemical, physical, radiological agents (nanoscale and other particulates, fumes, mists, or vapors) to the air via hood or other exhaust system.
3. ___ Transportation of hazardous or radioactive materials, including laboratory-to-laboratory and on-site or off-site.
4. ___ Activities requiring an emission permit.

E. Physical and Mechanical Concerns

1. ___ Fabrication of major (large mass or volume) equipment, structural supports.
2. ___ Work that is done in the proximity of floor openings or on elevated work platforms or scaffolds.
3. ___ Activities that require use of safety eyewear, respirators and/or other forms of personal protective equipment (PPE).
4. ___ Use of a glove box.
5. ___ Torch work, exposed source hot-work, or exposed heat sources (e.g. welding, soldering, arc welding, furnaces, etc.).
6. ___ Rotating parts or pinch points.
7. ___ Fluids or gases and pressure delivery systems, other than installed building utilities (> +/- 5 psig).
8. ___ Pressure vessels, vacuum vessels, and glass systems (> +/-5 psig).
9. ___ Use of hoists, cranes or rigging.
10. ___ Cryogenic systems (including thermal and/or oxygen deficiency hazards).
11. ___ Mechanical stored energy systems (e.g. flywheels, mechanical springs, etc.).
12. ___ Electromagnetic systems.

F. Workplace Concerns

1. ___ Confined space (as defined by Ames Laboratory ESH&A Program Manual, Section 5.18).
2. ___ Activities that limit means of egress.
3. ___ Temperature or humidity extremes.
4. ___ Work which produces acute noise that interferes with normal conversation.
5. ___ Activities that involve tasks of prolonged repetitive motion.
6. ___ Activities that involve lifting/moving of 20 pounds, lifting from awkward positions, or pushing/pulling of heavy objects.

G. Other Concerns

1. ___ Activities involving sub-contractors.
2. ___ Public tours of Ames Laboratory facilities or the use of equipment/materials for public displays.
3. ___ Area renovation.
4. ___ Activities that involve equipment valued at $100,000 or more in one room or laboratory.
5. ___ Activities to be performed at an "off-site" location (ISU lab space, field location, or other off-campus facility). Only check this item if any other item is checked